Seguin (E. C.)

ON OCCIPITAL HEADACHE AS A SYMPTOM OF URÆMIA.

I have recently met with two cases in which occipital headache was so localized and persistent as to give rise to a strong suspicion of organic disease of the cerebellum, and in one of them a positive conclusion was only reached by means of a *post mortem* examination. These cases both now appear to have been cases of contracted kidneys and uræmia.

I shall first relate the cases as they are in my case-book.

Case 1.—Lieut. X., U. S. A., aged 36 years, consulted me on November 5, 1879, and gave the following history; Until the time of his graduation from West Point, he had suffered from frequent general headaches; but that since leaving the school in 1867 he had had several severe attacks of occipital headache. These at first occurred two or three times a year, but in the last few years much more often, the attacks lasting from twenty-four to forty-eight hours, accompanied by vomiting and sometimes by delirium. These paroxysms were often relieved by bromide of potassium. In 1876, during Centennial times, he had one of his headaches, and with it an epileptiform convulsion, in which he did not bite his tongue. In February, 1879, at the same time with a headache, he had another convulsion, in which the tongue was bitten. He has noticed that while in the Northern States he has but few headaches, whereas when in Texas he has had a great many. He often has a feeling of soreness and fulness in the back of the neck, and is very nervous after the attacks; has been in the North since March. In August had a severe attack and another on October 26, aborted by bromide of potassium. This last headache was accompanied by stiffness and fulness in the

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back part of the neck. There are no special ocular symptoms during the attacks, and he considers his eyesight normal. During the paroxysms the face is flushed, the head feels full and pulsating. The father and the grandfather of the patient had sick-headache.

Mr. X. has abstained from the use of intoxicating drinks since 1876; he has never been injured about the head, and has never had syphilis.

Examination.—Eyesight normal to all ordinary tests; no astigmatism; no lesion seen with the ophthalmoscope. Cervical spine not tender; no symptoms of dyspepsia; heart normal. The general appearance is that of health. November 6th, looks puffy under the eyes. Three specimens of urine are examined with the following results: Their specific gravity is low, ranging from 1018 to 1020; they all contain albumen—from 1 per cent. to .5 per cent., and hyaline casts. The retinæ are reëxamined with negative results. Subsequently, numerous examinations of the urine were made by Dr. Alexander, Surgeon U. S. A. at West Point, and evidences of chronic Bright's disease were invariably found, such as low specific gravity, hyaline and granular casts; the amount of urea in one period of twenty-four hours was about twelve grammes.

Case 2.—Mr. J. W., a merchant, aged 47 years, was seen by me at Passaic, N. J., in consultation with Dr. J. C. Herrick, on December 21, 1879. I obtained the following hisotry of the case:

The patient had formerly enjoyed good health; had never received any injury to the head; no syphilis. During all his adult life he has suffered from headaches, more or less periodical, perhaps one in three weeks, each attack accompanied by nausea, and usually lasting one day. Of late years he has had much less of this headache; it was evidently migraine. About twelve years ago, in the streets of New York, during hot weather, he had an attack which was called "sunstroke." The symptoms of this attack are unknown. Mr. W. consulted me in 1874, but I have no notes of his case except a memorandum of my examination of the urine. This appears to have been perfectly normal.

In the last two years he has been almost constantly suffering from some headache, a little every morning, and more and more often of late he has had severe attacks. In the past two months very severe headaches, with nausea and vomiting several times a week. During the last two weeks has been confined to his bed. The patient and his wife clearly distinguish this pain from the

former headaches by several characteristics; the pain is more violent, it is distinctly occipital, and lately has been cervical as well; it appears in paroxysms at any time, chiefly during the day, and the pain itself is of a different character. After a migraine Mr. W. felt very well; but now after a severe headache he is prostrated and dull. The nausea always comes on after the pain; he has no nausea between the paroxysms. He has not had much frontal headache, but the pain has extended from the occiput into the vertex and the whole top of the head. Movements aggravate the pain. There is no affection of sight or hearing; no dizziness. Of late has needed morphia; Paullinia seemed effectual for a few days only. During the last week he has taken about 4 gm. of bromide of potassium a day, and on the day before yesterday he had 15 gm. in twenty-four hours. The attending physician has examined one specimen of urine, but found no albumen.

Examination.—Patient feeble; lies relaxed in bed; voice faint, but articulation is distinct; mind clear; the head is not tender. The right eyelid is in partial ptosis; no strabismus; the ophthalmoscope shows no lesion of the fundus (atropine used). The right side of the face is rather inert, but the tongue (heavily coated) points straight. The hands are of due proportionate strength; in walking the right foot is dragged after a few turns in the room. No incontinence of urine; morphia affects patient very readily; he has had none in twenty-three hours, yet he is dull, and his pupils are small and fixed. The heart is normal, but the pulse is quite irregular; beating 23 and 29 in successive thirds of a minute; twice in the minute an acceleration is noticed. There is a trace of œdema on the tibias. Patient denies that his neck is really stiff, though he carries his head on one side, and keeps it quite still; no opisthotonus. To-day the pain extends to the sixth cervical vertebra.

I declined to give a positive diagnosis until after the urine had been thoroughly examined. At the same time I saw that the patient was in great danger from exhaustion and a tendency to stupor; and that many of the symptoms of tumor in the cerebellum were present. One was lacking, viz: neuro-retinitis. I also thought he was brominized.

On December 23, three specimens of urine were received, and were at once examined by Dr. R. W. Amidon. The specific gravity was found to vary between 1024 and 1025; there was albumen in all, varying in amount from 3 to 10 per cent.; there were also in all specimens numerous hyaline and granular casts.

Mr. W. died on December 27th, in a comatose state ; no convulsions or further paralytic symptoms having shown themselves. The autopsy made on the 28th, showed that the cerebellum and the other parts of the encephalic mass were normal ; while both kidneys were extensively diseased. The left kidney was found completely diseased, granular and hard in places ; its membranes peeling off with difficulty. It had a reddened congested appearance, and showed some evidences of not only a chronic trouble, but of a more recent acute inflammatory action. The right kidney was found to be only partially affected ; somewhat congested, and with the same type of lesion.

Dr. Herrick, to whose courtesy I am indebted for the above account of the autopsy, adds : " The results of our examination go to show evidently that, after all, the patient's symptoms may have originated from a kidney disease, although we cannot explain yet why his headaches so many years should have been from such a cause. He had never complained of backache or of any of the usual symptoms of Bright's disease, except the head pain."

The following is a summary of the symptomatology of the two cases :

Both patients were adults ; both had suffered from chronic headache more or less of the migraine type ; at a given period the headache became transformed into a localized occipital pain, very different from that of the former attacks.

In Case 2, the pain extended down the cervical spine, and was so much aggravated by movement as to suggest a rigid state of the neck. In Case 1, there was once stiffness of the neck in an attack.

This peculiar headache was distinctly paroxysmal, but not at all periodical or influenced by any apparent outward circumstance. In both cases nausea accompanied the headaches, and in Case 2 it is clearly stated that the nausea was secondary in point of time.

Case 1 was made relatively clearer by the previous history of convulsions, and by the fact (not stated in the notes, but quite clear in my recollection) that the surgeons in attendance then (in 1876) found albumen in the urine.

Case 2 was greatly complicated by the presence of symptoms of slight paralysis, partial ptosis and a weak right leg. I am now disposed to think that these phenomena, together with the astonishing debility, staggering gait, and the sluggish state of the mind which I observed in this patient, were due

to brominism : a condition to which I have called attention as a possible serious complication in the diagnosis of disease.*

I would also remark that the symptoms of renal disease were not marked ; in one case there was no œdema, in the other a mere trace ; neither patient had the dyspeptic symptoms or the frontal headache which often suggest renal disease, and neither patient has the "Brighty look" which is so well known.

It is to be observed that the occipital sensation in these cases was true pain, not the painful paræsthesiæ which are sometimes due to lithæmia and oxaluria, and sometimes to eye-strain, and which are erroneously (or rather insufficiently) designated as cerebral hyperæmia.

In some respects the story of these cases is imperfect, and I particularly regret the lack of observations upon the quantity of urine passed, and upon the state of the arterial tension.

Still I am inclined to believe that the publication of these cases may serve to render more accurate the diagnosis of occipital headache, and to illustrate the utility of critically examining the urine in cases of any degree of obscurity ; more especially as occipital headache is scarcely mentioned as a symptom of uræmia.